

2010

By RICHARD D. HOOKER, JR.

ast forward to the year is 2010. America is at war with a regional adversary on another continent. Although outmatched in high-tech weaponry, the enemy is big, tough, and resolved to fight, aided by broken and urban terrain and a strong mobile missile force armed with nuclear and biological warheads. Weak in naval and air forces, its large armored field army is the trump card. It is a battle-hardened force twelve corps strong. Unlike Iraq in 1991 it is prepared to fight.

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Satellite imagery reveals enemy operational reserves some 100 kilometers inland from the forward edge of the battle area, consisting of an elite tank corps, a special operations brigade, and an air division of fighters and helicopters. The theater commander identifies this force as the enemy center of gravity. It must be destroyed.

In the joint force of 2010, every service owns assets that can attack an enemy force. More to the point, every service has a mature and comprehensive doctrine for striking complex target arrays, not in the air, not on the sea, but on land. The Army has its own deep strike munitions fired from improved multiple launch rocket systems

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comment arters Services, Directorate for Info	s regarding this burden estimate ormation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	his collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 1999	RT DATE 2. REPORT TYPE			3. DATES COVERED 00-00-1998 to 00-00-1999		
4. TITLE AND SUBTITLE Joint Campaigning in 2010				5a. CONTRACT NUMBER		
				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National Defense University, Institute for National Strategic Studies, 260 Fifth Avenue SW Bg 64 Fort Lesley J. McNair, Washington, DC, 20319				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAII Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	TES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	8		

Report Documentation Page

Form Approved OMB No. 0704-0188 (MLRS) and Army Tactical Missiles (ATACMs) as well as next-generation, stealthy attack helicopters armed with fire-and-forget missiles. The Navy can attack with cruise missiles, carrier-based strike aircraft, powerful arsenal ships, and submarines armed with long-range munitions. The Air Force comes to the fight with air expeditionary forces boasting stealthy state-of-the-art strike fighters and bunker-busting precision munitions, all controlled from airborne and satellite platforms. Even the Marine Corps will join in with its own strike fighters.

General Dominante, the theater CINC, can use a variety of lethal systems to attack the target. If successful, he will destroy enemy reserves in a single stroke. Now, with the joint force poised to carry the fight to the enemy, the time for decision has come. At a planning conference Lieutenant

with minimal help, the Air Force can break the back of the enemy

General Brilliant, the Air Force component commander, opens the bidding. He asks for the fire support coordination line (FSCL) to be drawn 50 kilometers forward of the ground forces

and that all systems that can attack enemy operational reserves be placed under his control as joint force air component commander (JFACC) to centralize the complex functions of targeting, airspace management, battle damage assessment, and reporting. After all, his service controls most of the air and space-based platforms that will perform these functions; and someone must provide the command, control, communications, computers, and intelligence (C4I) to efficiently execute the interdiction battle. With minimal help from other services, the Air Force can break the back of the enemy. JFACC argues that the joint force must fight an interdiction battle before attacking the enemy on the ground in order to focus all strike assets for a crippling blow. With good fortune a land battle can be avoided altogether.

Lieutenant General Hardcore, the Army forces commander, has a field army of two U.S. corps and one allied corps. He doubts that airpower alone can destroy enemy tank divisions and objects to losing control of his attack helicopters and rocket systems on the grounds that they are tactical assets. Though capable of deep strikes, they normally work for division and corps commanders who rely on their speed and massed fires to make decisive contributions in the main battle area. Furthermore, he argues that FSCL must extend forward to include the staging areas for enemy reserves since they can clearly move up and influence corps and division close fights within 48-72 hours—the doctrinal decision/action cycle for the fighting corps.

Hardcore feels he should control his "deep fight" to take out enemy operational reserves

while the Air Force focuses on strategic targets. And he wants the CINC to designate him as joint force land component commander (JFLCC), with control of the Marine division, to ease the problems of targeting and boundary coordination and ensure unity of effort on the ground. He believes the mine and cruise missile threat makes amphibious landings unwise, leaving the Marines to fight alongside the Army anyway. Hardcore argues that coordinating fires and maneuver between Marine and Army units in a fast-paced ground battle demands functional command.

During the break, the Navy and Marine commanders share their misgivings. The naval component commander, Vice Admiral Spray, commands four carriers and a fleet of surface warships and submarines, while Lieutenant General Granite, the senior marine officer, commands a Marine expeditionary force of one division, one air wing, and one Marine expeditionary brigade. Clearly, neither the CINC nor his component counterparts fully grasp the potential of newly fielded sea-based systems to deliver crushing blows against land targets.

Once again, Army and Air Force commanders want to misapply the Marine air-ground task force by treating it as a division with some supporting aviation rather than an integrated airground team that fights as one entity. They believe new mine countermeasures and missile suppression systems make landings not only feasible but desirable. Undoubtedly, a functional land component command threatens the doctrinal employment of the Navy-Marine Corps team in littoral operations. With theater air forces preoccupied with strategic strikes deep in the enemy rear and Army forces focusing on close operations on the ground, Spray and Granite believe neither can devote sufficient attention to the intermediate interdiction battle. Fully interoperable with theater C4I systems, with sophisticated sea-based reconnaissance systems and an entire array of surface, air, and submarine platforms, maritime forces are poised to deliver newly acquired muscle to devastating effect. The stage is set for dynamic operational maneuver from the sea. Will these forces get the chance?

After a vigorous presentation by the naval and maritime commanders, followed by spirited debate among the component commanders, the dismayed CINC tells the group that he will weigh their recommendations and announce his decision within 24 hours. Before retiring he contacts the Chairman, who reminds him of the importance of teamwork within the joint force and pledges his support for the ultimate decision.

Briefing at Twin Bridges, Korea, during Foal Eagle '98.



As he drifts towards a troubled sleep, General Dominante reflects on the previous 14 years. In an amazingly short time, the U.S. military acquired an array of overmatching high tech systems. Though greatly outnumbered on the ground, with far fewer naval and air platforms than before, American forces are now at least a generation ahead in advanced weaponry. The equipment is good. But service visions about how to fight clash. With all services now focused on killing land-based targets, and each believing passionately in its own doctrine and capabilities, the job is tougher, not easier. Who is right?

Ties That Bind

Service visions about how to fight are based on service cultures, themselves derived from the defining experiences of World War II. That conflict—the greatest in history—created doctrinal and organizational foundations that ran broad and deep in the services, giving them institutionalized visions of warfare that decisively shaped how they looked at war.

During World War II the services enjoyed remarkable independence. The Army controlled the campaigns in North Africa, Italy, and northwest

Europe; the Navy reigned supreme in the central Pacific and the battle for the Atlantic; and the Army Air Forces, by then all but independent, pursued strategic bombing campaigns virtually autonomously. The traditions of strategic primacy rooted in these defining events come from a time when the services slew giants and became giants themselves. These experiences do not belong to a distant past. The senior military leaders of the 1990s joined services led by men who had lived through the greatest war in history.

Korea and Vietnam shook but did not shatter those foundations. Throughout the Cold War the military departments focused on dominant themes derived from their World War II experiences which drove their budgets, doctrine, and force structure: decisive victory on land for the Army, command of the sea for the Navy, and command of the air for the Air Force. Though each service pursued secondary roles, these themes defined their institutional being. Interservice friction often occurred where roles overlapped but in general service primacy in the operational domains of land, sea, and air warfare kept the system at equilibrium.

Through the 1990s and beyond the Army saw its principal role as prompt and sustained land warfare and its core competency as large-scale ground combat. Only it had the heavy mechanized forces and air-transportable forcedentry units to conduct decisive operations on land, as well as the logistics to support sustained land campaigns. Though dependent on its sister services for strategic mobility and close air support, the Army saw itself as uniquely able to seize and control terrain.

Air superiority and strategic bombardment (nuclear or conventional) were defining roles for the Air Force. Its core competencies were large-

service visions stressed service concerns, played to service strengths, and supported service claims for primacy scale air operations to gain air superiority and destroy strategic centers of gravity. Only the Air Force had the command and control, long-range bombers, fighter/attack planes, and refueling aircraft to conduct large-scale strategic bombing campaigns. Able to operate independently of the other services,

it cherished a strong belief in airpower as the decisive instrument in modern war.

The primary Navy role was sea control, with offensive operations in blue water and force projection as core competencies. Only the Navy had surface, submarine, and air forces to wage campaigns at sea. The only truly self-contained service, it (with its Marine Corps brethren) had its own strong land, sea, and air assets and saw command of the sea as a precondition for victory.

The defining roles of the Marine Corps were amphibious assault and forward presence. In

Guarding B–2 during exercise at Whiteman Air Force Base.



wartime, however, it fought land battles along with Army forces, having made just one opposed amphibious landing in fifty years. Only the Marines had organic air-ground task forces trained and equipped to conduct ship-to-shore offensive operations.

Each service thus brought a distinct approach and a unique view of its role in the joint fight. Far from holding on to dead theories from the past, all possessed highly refined processes for evaluating traditional and evolving doctrines and technologies to keep pace with the changing face of war. Still, the services did not willingly discard the proven for the unproven. For the generals and admirals held accountable for victory or defeat, the only test that really mattered was battle.

The 20th century tendency to look at warfare from a distinct service perspective was not necessarily a weakness. Although the Armed Forces accepted the notion of joint warfighting broadly defined, the persistence of service-unique perspectives remained grounded in unique competencies and mastery of land, sea, and air warfare. Seen in this light, behavior which looked like parochialism was in fact an operating style based on a professional milieu of values, traditions, and experiences that made each service the best at what it did.

Nevertheless service visions contained distortions. They stressed service concerns, played to service strengths, and supported service claims for resources and primacy. While no service consciously ignored national security to pursue its own interests, each viewed its interests as central to national security.

Joint Vision 2010, a framework of joint operational concepts intended to harmonize service visions and doctrines, appeared in 1996. But new joint concepts competed with other priorities. Defense spending leveled off even as expensive systems came online, forcing the services into more downsizing and ever-fiercer conflict for disappearing resources. Impatient to modernize, the services embraced leading edge technology with impressive speed, hoping to offset loss of mass through information dominance and precision engagement. Rivalries intensified as the old rules regulating inter-service competition went by the board. All services suffered—some more than others—as force structure was trimmed to pay for advanced systems.

As the new century begins service visions about how to fight militate against clear decision-making despite the buildup of joint doctrine throughout the 1990s. Without a distinct consensus, thorny issues about control of joint fires,

functional versus component command, control of space, and theater ballistic missile defense are finessed in the interest of service comity, already strained by the budget wars. Encouraged by joint successes in small-scale noncombat operations, America's Armed Forces focus on absorbing the latest technology, skirting one iron law: when information and ordnance cross service boundaries bad things can happen.

Back to the Future

The national military strategy of 2010 establishes a one major regional war requirement with a parallel emphasis on comprehensive global engagement. The services see themselves transformed in ways that challenge their very assumptions of being. Their positions harden as peacekeeping and humanitarian assistance training and deployments become core missions, especially for the Army and Air Force.

The United States faces several regional powers with large armies but weak naval and air forces. Its most likely conflicts are not about controlling sea lanes or airspace but defending land, populations, and resources. To remain relevant, all four services assume attack of ground targets as a primary mission. This transforming event—a sea change in the world of warfighting—largely escapes notice in such turbulent times.

For those willing to look closely there were warning signals. "Service visions" featured eyecatching layouts but were remarkably thin and sketchy. With brief nods to the *National Security Strategy* and *Joint Vision 2010*, they expressed service positions with scant mention of sister services. Though technology and the threat now focused all services on land targets, the actual mechanics of targeting, airspace deconfliction, theater ballistic missile defense, theater logistical architecture, intelligence dissemination, and a hundred other battlefield processes evaded precise definition and resolution.

The problem was not technology. Digitization provided a theoretical capability to share real-time intelligence down to the smallest tactical unit. Interactive and interoperable information-sharing technologies promised seamless data transfer across the force. Gone were the days when voluminous air tasking orders had to be flown from shore to ship. The real problem was uniquely human and very old. Its roots lay in the propensity of commanders to command and staffs to staff.

Organizational theorists had long known that a "law of unintended consequences" operated when information crossed organizational boundaries. Systems evolved over decades and centuries to filter out *noise* and reinterpret, analyze, and summarize—that is, to staff—incoming

information to help commanders make decisions. While necessary, the staffing process changed the meaning and content of information in unpredictable ways. When refined, amplified, and summarized, informational inputs emerged as outputs in altered form. Since staffs served the commander first and subordinate units second, every boundary crossed represented another iteration of staffing. The net result was cascading versions of *processed* information backed up in head-quarters decision cycles, which delayed its arrival to the fighting units in contact at the sharp end of the force.

Where information moved between command echelons within a service, some distortion was accepted as necessary and unavoidable friction. There, at least, units belonging to the same service spoke the same language, used the same jargon, and used the same tactics, techniques, and procedures. But when data and firepower crossed service boundaries, the problem increased exponentially.

Commanders played a special role in this process. The essence of command was perceived to be control of assigned units to accomplish a given mission. Because commanders were directly accountable for results they stressed centralizing command, implementing detailed SOPs, and publishing comprehensive orders. In all services, command meant well understood prerogatives not to be trifled with. Placing forces under commanders from other services risked misutilization and took them out of the "service" fight altogether.

Use of airpower proved the most vexing issue. Component commanders naturally preferred to use service air to support service missions. Air component commanders argued for centralized control of fighters and bombers as the best, most flexible way to exploit America's airpower advantage. Though similar in many respects, service aviation communities had important differences and modes of employment which offered many points of divergence. In peacetime, each tended to train in service regimes, not joint environments.

Effective control of ground forces was also a gnawing concern. In major conflicts—such as World War II, Korea, and Vietnam—joint operations with Army and Marine divisions led to friction. In Grenada, marines operated independently from Army units, hindering coordination for fires and schemes of maneuver. During Desert Storm, Army and Marine units were separated physically by inserting Arab Coalition forces between them and maintaining separate operational chains. Both services had distinct ways they planned, supported themselves, and integrated fires and close air support.

Tomahawk missile being launched, Desert Fox.



In low intensity combat where air or ground units from different services operated side by side, service differences were muted by assigning different missions or geographical areas of responsibility and by implementing component rather than functional command arrangements. Behind the scenes, service tensions operated powerfully at the margins where core missions overlapped. Still, U.S. forces overwhelmed weak opposition in Grenada and Panama. No sharp defeats disturbed the delicately balanced relations between the services.

The Gulf War afforded a glimpse of things to come. Though largely ignored in the heady aftermath of victory, problems at points of collision such as JFACC control of Navy and Marine air, battlefield interdiction apportionment and targeting, and unified command of ground forces proved to be headaches for joint commanders. An outmatched opponent and a short war ensured that these problems did not receive closer scrutiny.

But for the first time in the post-Cold War era, naval and air forces joined with ground forces to fight a large armored opponent on land. That was the time to learn and apply fresh lessons from the battlefield. But following the war the military began a bitter cycle of drawdowns, base closures, budget battles, and restructuring that lasted a generation. Deemed more important, these issues took center stage.

Amid a welter of change, by 2010 the reorientation propels the services into head-on conflict. As the weapons which could attack operational and tactical land targets proliferate in every service, each component fights to retain battlefield control of its systems in accordance with service doctrine and culture. In the end the Armed Forces do not grasp the nettle. In the end the CINC has to.

The CINC Decides

"Ladies and gentlemen, the commander in chief."

"Good morning, folks." The CINC betrays none of his inner turmoil as he strides into the underground conference room and takes his seat, flanked by his deputy and component com-

"We can't afford to let this war drag out. We're losing public support."

manders. "First, let me update you on our progress. As you know, this has not been a replay of the

Gulf War we engaged in as youngsters. These guys are fighting us hard and coming back for more. We've taken their air and navy out and fought our way into the theater. On the ground we're ready to move to the offensive. That's the good news.

"The bad news is that our troop losses, while they haven't crippled us, are far higher than expected. We can't afford to let this war drag out. We're losing public support.

"Another thing. Some of you have heard through the grapevine that we have problems in EASTCOM. We do—big problems. We may have to send you there and do this all over again. In fact the National Command Authorities are planning on it." Even in a room full of seasoned flags the involuntary gasps and curses are audible.

The CINC continues, "I've thought long and hard about the next phase of operations. You've all made persuasive arguments and they all make sense—from your point of view. Unfortunately, there's no consensus about how we should proceed since each component has its own perspective. I wish we could have done a better job of sorting this out when we had the time. It's late in

the game to be figuring out our techniques and procedures on the fly. I pray that our young folks won't have to pay for our mistakes. But I'm afraid some of them will."

Around the table the officers tense as the CINC delivers his guidance. "Each of you have ongoing missions you'll retain. General Brilliant, you'll continue to attack the strategic centers of gravity we've identified. General Hardcore, now is the time to take the fight to the enemy and to punch through his front-line field forces. Admiral Spray, you will continue to protect our seaborne flank and attack targets ashore with your ships and planes. General Granite, I'm holding the Marine expeditionary brigade in reserve for possible amphibious operations. General Hardcore will take control of the Marine expeditionary force as the land component commander, with you as deputy JFLCC.

"We're now entering the critical phase of the war and I want to achieve a decision as quickly as possible. That means we take out enemy operational reserves in one go. I have decided to give the mission to JFACC and task him to attack and destroy those reserves. General Brilliant, your fight and our ground offensive will take place simultaneously. You have 48 hours to tell me what you need from across the theater to accomplish the mission. Except for the component commanders' minimum operational requirements for fleet defense and close air support, you'll control all our long shooters and strike planes. Once the ground forces close to within 50 kilometers of the reserves, control passes to JFLCC for the finish fight."

Leaning back in his chair, Dominante searches the faces of his commanders. "I know this decision won't fully satisfy any of you. I know your services have different ideas about how to fight. But I'm convinced this is the best option. Now it's up to all of us to figure out how to make it work. We have one week before kick-off. Let's get going."

As they file out of the room the CINC turns to his deputy. "If we blow this it could mean the end of America as a superpower. And I just told my warfighters something none of them wanted to hear. What does that make me?"

The deputy smiles at his old friend. "It makes you a general."

"Now let's go win this war."

Joint warfighting promises optimum efficiency for a high quality but smaller force. Its goal is to:

- maximize the capabilities each service brings to the fight
- synchronize the joint fight by integrating land, sea, amphibious, air, and space forces



caused when two or more services are tasked to employ forces together in the same operational medium. This will now be the norm. The principles of concentration and unity of effort will drive the joint force toward functional command (a JFACC or JFLCC) for more effective control and coordination of complex operations. However component commanders will resist loss of control to functional commanders because it means ceding control over a major part of their organization, they lack faith that their assets will be prop-

Service friction will intensify as the Navy and Air Force are reoriented on ground targets,

erly employed, or such use diverts component

assets from other missions.

given the absence of peer competitors among the naval and air forces of our most likely opponents. The challenge is to temper this friction not by replacing unique service doctrines and competencies with equivalent joint ones but by promoting complementary service doctrines within the framework of a common doctrine for joint operations. By answering hard questions now, the Armed Forces can take the decisive step to move *Joint Vision 2010* from concept to reality.